

Federal Operating Permit

Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80 Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Bear Island Paper Company, L.L.C.
Facility Name: Facility Location:	Bear Island Paper Company, L.L.C. 10026 Old Ridge Road Ashland, Virginia
Registration Number: Permit Number:	50840 PRO-50840

January 1, 2005
Effective Date

January 1, 2010
Expiration Date

Robert G. Burnley
Director, Department of Environmental Quality

Signature Date

Table of Contents

I.	Facility Information	4
II.	Emission Units.....	5-7
III.	Fuel Burning Equipment Requirements - (B&W Combination Boiler-Unit Ref. #2).....	8
	A. Limitations	8
	B. Monitoring.....	9
	C. Recordkeeping.....	9
IV.	Fuel Burning Equipment Requirements - (Package Boiler-Unit Ref. #3)	10
	A. Limitations	10
	B. Monitoring.....	13
	C. Recordkeeping.....	13
	D. Testing.....	14
	E. Reporting	14
V.	Process Equipment Requirements (Wood Yard-Unit Ref. #4).....	14
	A. Limitations	14
	B. Monitoring.....	15
	C. Recordkeeping.....	16
VI.	Process Equipment Requirements (Thermomechanical Pulp Mill-Unit Ref. #1).....	16
	A. Limitations	16
	B. Monitoring.....	17
	C. Recordkeeping.....	17
VII.	Process Equipment Requirements (Waste Water Treatment Plant-Unit Ref. #5).....	18
	A. Limitations	18
	B. Monitoring.....	18
	C. Recordkeeping.....	18
VIII.	Process Equipment Requirements (Paper Mill/Machine-Unit Ref. #6)	18
	A. Limitations	18
	B. Monitoring.....	18
	C. Recordkeeping.....	19
	D. Testing.....	19
IX.	Facility Wide Conditions	19
	A. Limitations	19
	B. Recordkeeping.....	20
	C. Testing.....	21
X.	Insignificant Emission Units	21
XI.	Compliance Plan.....	22
XII.	Permit Shield & Inapplicable Requirements	22
XIII.	General Conditions	22
	A. Federal Enforceability.....	22
	B. Permit Expiration	22

C.	Recordkeeping and Reporting	23
D.	Annual Compliance Certification	23
E.	Permit Deviation Reporting	24
F.	Failure/Malfunction Reporting	24
G.	Severability	24
H.	Duty to Comply	24
I.	Need to Halt or Reduce Activity not a Defense	25
J.	Permit Action for Cause	25
K.	Property Rights	25
L.	Duty to Submit Information	25
M.	Duty to Pay Permit Fees	26
N.	Fugitive Dust Emission Standards.....	26
O.	Startup, Shutdown, and Malfunction.....	26
P.	Alternative Operating Scenarios	26
Q.	Inspection and Entry Requirements.....	27
R.	Reopening For Cause	27
S.	Permit Availability	27
T.	Transfer of Permits	27
U.	Malfunction as an Affirmative Defense.....	27
V.	Permit Revocation or Termination for Cause	28
W.	Duty to Supplement or Correct Application	28
X.	Stratospheric Ozone Protection.....	28
Y.	Accidental Release Prevention	28
Z.	Changes to Permits for Emissions Trading.....	29
AA.	Emissions Trading	29
XIV.	State-Only Enforceable Requirements	29

I. Facility Information

Permittee

Bear Island Paper Company LLC
10026 Old Ridge Road
Ashland, Va. 23005

Responsible Official

Jacques Beauchesne
General Manager
(804) 227-4001

Facility

Contact person

Jacques Beauchesne
General Manager
(804) 227-4001

Identification Number: 51-085-0042

Facility Description: SIC Code: 2621- Pulp Mill establishments primarily engage in manufacturing pulp from wood or from other materials, such as rags, linters, wastepaper, and straw. Establishments engaged in integrating logging and pulp mill operations are classified according to the primary products shipped. Establishments engaged in integrated operations of producing pulp and manufacturing paper, paperboard, or products there of are classified in Industry 2621 if primarily shipping paper or paper products.

The facility manufactures newsprint. The facility mixes newsprint made from trees with recycled paper. Bear Island Paper Company manufacturing facility consists of the following: wood yard, thermomechanical paper mill, sludge dryer (not operating), combination boiler, package boiler, wastewater treatment plant, recycle mill, and paper machine.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment: COMBINATION BOILER (B&W) - Unit Ref. #2							
PH-1A	PH-1S	Coal	243 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -B	PM/PM-10	06/30/04
PH-1B	PH-1S	Bark/Paper Sludge/Wood Chips/Combustion	243 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -B	PM/PM-10	06/30/04
PH-1C	PH-1S	Number 2 Fuel Oil Combustion	243 mmBtu/hr	Multi-cyclone, Electrostatic Precipitator and low sulfur fuels not to exceed 0.2%	PHC-1A PHC -B	PM, PM-10, SO ₂	06/30/04
PH-1ABC	PH-1S	Natural Gas	5.2 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -B	PM/PM-10	06/30/04
PH-1ABC	PH-1S	Propane	12.5 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -B	PM/PM-10	06/30/04
Fuel Burning Equipment: PACKAGE BOILER - Unit Ref. #3 – NSPS (40 CFR 60.40b Subpart Db)							
PH2-2A	PH2-2S	Natural Gas/Propane Combustion	255 mmBtu/hr	Clean burning fuels	None	PM/PM-10	06/30/04
PH2-2B	PH2-2S	Number 2 Fuel Oil	247 mmBtu/hr	Low sulfur fuels, not to exceed 0.2% <u>and</u> low nitrogen fuels, not to exceed 0.3% by weight.	None	SO ₂ & NO _x	06/30/04

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Wood Yard – Unit Ref. #4							
WY-1A	Fugitive	Wood Yard	1,600 BDT/day BDT = Bone Dry Tons	None	None	None	06/30/04
WY-1B (WY-I1, WY-I2, WY-I3)	VENT	Wood Yard Log Handling, Chip/Bark/Sludge Handling, Bark/Chip Piles, Wood Waste, Slashing	1,600 BDT/day BDT = Bone Dry Tons	Enclosure Est. Efficiency 95%	None	None	06/30/04
TMP-Process – Unit Ref. #1							
TMP-1	Fugitive	Entire Wood Fiber Line	942 ADT/Day ADT = Air Dry Tons	-	-	PM/PM-10	-
TMP-1A	TMP-1AS	Latency Transfer Chest and Rejects Chest	942 ADT/Day ADT = Air Dry Tons	Heat Recovery and Condenser System Unit 1 (2 Stage)	PHC-1A	VOC Rated at 40.5 %	RACT July 12, 1996 Consent Agreement
TMP-1B	TMP-1BS	Steam Tubes and Atmospheric Refiners	942 ADT/Day ADT = Air Dry Tons	Heat Recovery and Condenser System Unit 2 (2 Stage)	PHC-1B	VOC Rated at 40.5 %	RACT July 12, 1996 Consent Agreement
TMP-1C	TMP-1CS	Thickener	942 ADT/Day ADT = Air Dry Tons	None	None	None	RACT July 12, 1996 Consent Agreement
TMP-51D	TMP-1CS	Reject Refiners	942 ADT/Day ADT = Air Dry Tons	None	None	None	RACT July 12, 1996 Consent Agreement

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Wastewater Treatment Plant – Unit Ref. #5							
WWTP-1	Fugitive	Wastewater Treatment Plant – hydraulic cap.	4.2 MGD and 4.8 MGD daily max. MGD = mm gal/day	None	None	None	Letter: Re-rating WWTP June 10, 2002
Paper Mill – Unit Ref. #6							
PM-1A	VENTS PM 1-12	Paper De-watering, Forming and Drying	39 BDT/hr BDT = Bone Dry Tons	None	None	VOC	
PM-1B	VENTS PM 1-12	Paper Machine Cleaning	39 BDT/hr BDT = Bone Dry Tons	None	None	VOC	
Recycle Plant – Unit Ref. #7							
RPM01	Fugitive	Recycle Facility: Drum Pulper, Screens, Flotation Cells, Disc Thickener, Double Wire Press, Post-Flotation, Drum Washer	254 BDT/day - output	None	None	PM/PM-10 & VOC	
Parts Washers							
MI-I1	Fugitive	7 Assorted Parts Washers totalling 266 gallons – Non Halogen – Safety Clean Services.	266 gallons - Total <u>combined</u> capacity. 2 @ 26 gallons, 3 @ 77 gallons and 2 @ 30 gallons.	None	None	VOC	

III. Fuel Burning Equipment Requirements: B&W COMBINATION BOILER - Unit Ref. #2

A. Limitations

1. Particulate Matter (PM) and PM-10 emissions from the B&W combination boiler, Unit Ref. No. 2, shall be controlled by a multi-cyclone followed by an electrostatic precipitator. The electrostatic precipitator shall be equipped with monitoring devices that continuously measure the primary voltage, primary current and secondary current. The electrostatic precipitator shall be provided with adequate access for inspection.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 4 of the 06/30/2004 Permit)
2. Carbon monoxide emissions from the B&W combination boiler, Unit Ref. No. 2, shall be controlled by the coal and wood waste burner arrangement.
(9 VAC 5-50-20, 9 VAC 5-80-110 and Condition 5 of the 06/30/2004 Permit)
3. Sulfur dioxide emissions from the B&W combination boiler, Unit Ref. No. 2 and package boiler, Unit Ref. No. 3, shall be controlled by required use of low sulfur fuel and shall not exceed 0.2 percent by weight per shipment.
(9 VAC 5-80-10, 9 VAC 5-80-110 and Condition 7 of the 06/30/2004 Permit)
4. Volatile Organic Compound emissions (VOC) from the B&W combination boiler, Unit Ref. No. 2 shall be controlled by the use of good combustion practices.
(9 VAC 5-80-110 and Condition E-3 of the July 12, 1996 RACT Consent Agreement)
5. The B&W combination boiler, Unit Ref. No. 2, shall not fire wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day unless the boiler is also firing coal in combination with wood, wood waste and paper sludge/paper waste.
(9 VAC 5-170-160, 9 VAC 5-80-110, 5-50-20 and Condition 11 of the 06/30/2004 Permit)
6. The oxygen content of the flue gas, of the B&W combination boiler, Unit Ref. No. 2, shall not be less than 2 percent by weight when the boiler is firing wood waste and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The combination boiler shall be equipped with an oxygen sensor. The oxygen sensor shall be maintained such that it is in proper working order at all times. The oxygen content of the boiler shall be recorded a minimum of once every eight hour shift when the combination boiler is firing wood waste and paper sludge/paper waste in excess of 450 tons per day. The oxygen readings shall be used to calculate a thirty (30) day rolling average.
(9 VAC 5-50-20, 9 VAC 5-80-110 and Condition 12 of the 06/30/2004 Permit)
7. The approved fuels for the B&W combination boiler, Unit Ref. No. 2, are bituminous coal, distillate oil, natural gas, propane, wood waste, and paper waste/sludge resulting from paper recycling, the TMP process and wastewater treatment at the facility. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-1100, 9 VAC 5-80-110 and Condition 20 of the 06/30/2004 Permit)
8. The sulfur and ash content of the coal to be burned in the B&W combination boiler, Unit Ref. No. 2, shall not exceed 1.2 percent and 12 percent by weight, respectively, per shipment. The permittee shall maintain records (supplier fuel analysis) of all coal shipments purchased. These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five (5) years.
(9 VAC 5-170-160, 9 VAC 5-80-110, 9 VAC 5-80-1100 and Condition 21 of the 06/30/2004 Permit)

9. Emissions from the operation of the B&W combination boiler, Unit Ref. No. 2, shall not exceed the limits specified below:

Total Suspended Particulate	0.10 lbs/10^6 Btu	24.3 lbs/hr	106.4 tons/yr
PM-10	0.10 lbs/10^6 Btu	24.3 lbs/hr	106.4 tons/yr
Sulfur Dioxide		518.4 lbs/hr	2270.6 tons/yr
Nitrogen Oxides (as NO₂)	0.70 lbs/10^6 Btu	170.1 lbs/hr	745.0 tons/yr
Carbon Monoxide		257.2 lbs/hr	1126.3 tons/yr
Volatile Organic Compounds		7.0 lbs/hr	30.7 tons/yr

(9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 27 of the 06/30/2004 Permit)

10. Visible emissions from the B&W combination boiler, Unit Ref. No. 2, shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-50-80, 9 VAC 5-50-20, 9 VAC 5-80-110, and Condition 30 of the 6/30/2004 Permit)

11. Minimum standards for visible and fugitive emissions from the crushing, conveying, storage, and handling of coal used in the B&W combination boiler, Unit Ref. No. 2, shall apply as stated in Article 4-15 – Standards for Coal Preparation.

(9 VAC 5-40-1990 and 9 VAC 5-40-2000)

B. Monitoring

1. A continuous monitoring system for measuring and recording the nitrogen oxides emissions from the B&W combination boiler, Unit Ref. No. 2, stack shall be installed, calibrated, maintained and operated by the owner or operator unless it is demonstrated during performance tests that the emissions of nitrogen oxides is 30 percent or more below the allowable of 0.70 pounds/ 10^6 BTU heat input (less than 0.49 pounds/ 10^6 BTU heat input).

(9 VAC 5-170-160, 9 VAC 5-50-20, 9 VAC 5-80-110 and Condition 14 of the 06/30/2004 Permit)

2. A continuous monitoring system for measuring and recording the opacity of the B&W combination boiler, Unit Ref. No. 2, stack emissions shall be installed, calibrated, maintained and operated by the owner or operator.

(9 VAC 5-50-20, 9 VAC 5-50-40, 9 VAC 5-80-110 and Condition 15 of the 06/30/2004 Permit)

C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual throughput of (each permitted fuel) coal, distillate oil, propane, natural gas, wood waste and paper waste/sludge fired in the B&W combination boiler, Unit Ref. #2, calculated monthly as the sum of each consecutive 12-month period.

- b. Certification for each coal shipment purchased, indicating sulfur (not to exceed 1.2 percent) content and ash (not to exceed 12 percent) content by weight, respectively, per shipment.
- c. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
- d. CEM records for the B&W combination boiler.
- e. Once per shift the electrostatic precipitator meter/gauge readings to include the primary and secondary voltage and amperage readings.
- f. Records indicating coal usage when wood, wood waste and paper sludge/paper waste is being fired in excess of four hundred and fifty (450) tons per day.
- g. The B&W combination boiler flue gas oxygen content shall be recorded when the boiler is firing wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The oxygen readings shall be averaged on a thirty (30) day rolling basis.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-20-110 and Condition 33 of the 06/30/2004 Permit)

IV. Fuel Burning Equipment Requirements: PACKAGE BOILER – Unit Ref. #3
Subject to NSPS (40 CFR 60 subpart Db)

A. Limitations

- 1. Nitrogen oxide emissions from the package boiler, Unit Ref. No. 3, shall be controlled by boiler design, and good operation procedures. The package boiler shall be provided with adequate access for inspection.
(9 VAC 5-80-20, 9 VAC 5-80-110 and Condition 6 of the 06/30/2004 Permit)
- 2. Particulate matter emissions from the package boiler, Unit Ref. No. 3, shall be controlled by the use of clean burning fuels.
(9 VAC 5-80-20, 9 VAC 5-80-110 and Condition 8 of the 06/30/2004 Permit)
- 3. Carbon monoxide and VOC emissions from the package boiler set, Unit Ref. No. 3, shall be controlled by the use of good combustion operating practices.
(9 VAC 5-80-10, 9 VAC 5-80-110, Condition E-3 of the July 12, 1996 RACT Consent Agreement, and Condition 9 of the 06/30/2004 Permit)
- 4. The maximum nitrogen content of the oil to be burned in the package boiler, Unit Ref. No. 3, shall not exceed 0.3 percent by weight per shipment. The maximum sulfur content of the oil to be burned in the package boiler shall not exceed 0.2 percent (facility-wide limitation). The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier
 - b. The date on which the oil was received
 - c. The volume of distillate oil delivered in the shipment

- d. The nitrogen and sulfur content of the oil

(9 VAC 5-170-160, 9 VAC 5-50-410, 9 VAC 5-80-110, 9 VAC 5-50-20 and Condition 13 of the 06/30/2004 Permit and Condition 22 of the 06/30/2004 Permit)

5. The package boiler, Unit Ref. No. 3, shall consume no more than the following:

Natural Gas	255×10^3 ft ³ per hour	735.0×10^6 ft ³ per year
Propane	2.78×10^3 gal per hour	8.01×10^6 gal per year
No. 2 Fuel Oil	1890 gal per hour	5.40×10^6 gal per year

When using a combination of natural gas, propane and No. 2 fuel oil during any calendar year, the annual heat input shall not exceed 7.35×10^{11} BTU based on a higher heating value of 1000 BTU/ft³ for natural gas, 91,690 BTU/GAL for propane, and 1.31×10^5 BTU/gal for No. 2 fuel oil.
 (9 VAC 5-170-160, 9 VAC 5-80-110, and Condition 24 of the 06/30/2004 Permit)

6. The package boiler, Unit Ref. No. 3, shall not operate more than 2880 hours per calendar year.
 (9 VAC 5-170-160, 9 VAC 5-80-110, and Condition 25 of the 06/30/2004 Permit)
7. The package boiler, Unit Ref. No. 3, shall not operate more than 10 percent of the maximum "annual capacity factor" unless the requirements as stated in specific Condition IV.B.1 of this permit have been met. The annual capacity factor is defined in 40 CFR 60 subpart Db paragraph 60.41b.
 (9 VAC 5-170-160, 9 VAC 5-80-110, 9 VAC 5-50-410 and Conditions 16 and 26 of the 06/30/2004 Permit)
8. Criteria pollutant emissions from the operation of the package boiler, Unit Ref. No. 3, shall not exceed the limitations specified below:

- **NATURAL GAS**

	Pounds per 10^6 BTU	Pounds per hour
TSP	5.1×10^{-3}	1.3
PM-10	5.1×10^{-3}	1.3
Sulfur Dioxide (3-hour rolling average)	2.8×10^{-3}	0.7
Nitrogen Oxides (30-day rolling average)	1.0×10^{-1}	25.5
Carbon Monoxide		5.1
Volatile Organic Compounds		2.6

- **PROPANE/AIR MIXTURE**

	Pounds per 10^6 BTU	Pounds per hour
TSP	5.1×10^{-3}	1.3
PM-10	5.1×10^{-3}	1.3
Sulfur Dioxide (3-hour rolling average)	2.8×10^{-3}	
Nitrogen Oxides (30-day rolling average)	1.0×10^{-1}	25.5
Carbon Monoxide		5.1
Volatile Organic Compounds		2.6

- **NO. 2 FUEL OIL**

	Pounds per 10^6 BTU	Pounds per hour
TSP	1.0×10^{-1}	25.5
PM-10	1.0×10^{-1}	25.5
Sulfur Dioxide (3-hour rolling average)	2.2×10^{-1}	56.1
NO _x (30-day rolling average)	1.0×10^{-1}	25.5
Carbon Monoxide		4.9
Volatile Organic Compounds		2.5
Lead		0.002

Must be met at all times except start-ups, shutdowns including malfunctions.

<u>PACKAGE BOILER MAXIMUM ANNUAL EMISSIONS</u>	<u>TONS PER YEAR</u>
TSP	36.7 tons/yr
PM-10	36.7 tons/yr
Sulfur Dioxide	80.8 tons/yr
Nitrogen Oxides	36.7 tons/yr
Carbon Monoxide	7.3 tons/yr
Volatile Organic Compounds	3.7 tons/yr
Lead	5.8 lbs/yr

(9 VAC 5-50-260, 9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 28 of the 06/30/2004 Permit)

9. Total toxic pollutant emissions from the package boiler, Unit Ref. No. 3, shall not exceed the limitations specified below:

	Pounds per hour	Tons per Year
Benzene	0.1	0.2
Formaldehyde	0.1	0.1
Arsenic	0.001	0.001
Beryllium	0.001	0.001
Cadmium	0.003	0.004
Chromium	0.01	0.02
Copper	0.07	0.1
Manganese	0.003	0.005
Mercury	0.001	0.001
Nickel	0.04	0.06
Selenium	0.006	0.00828
Vanadium	0.02	0.03

(9 VAC 5-50-260 and Condition 29 of the 06/30/2004 Permit)

10. Visible emissions from package boiler, Unit Ref. No. 3, exhaust shall not exceed 10 percent opacity, except during one six-minute period per hour which shall not exceed 20 percent opacity.
 (9 VAC 5-170-160, 9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 31 of the 06/30/2004 Permit)

B. Monitoring

1. A continuous emissions monitoring system shall be installed and operational within ninety (90) calendar days of exceeding 10 percent of the annual capacity factor. The continuous emission monitoring system (CEMS) consisting of a NO_x monitor and a suitable diluent monitor (either CO₂ or O₂), shall be installed on the package boiler, Unit Ref. No. 3. Each NO_x CEMS shall be performance tested in accordance with EPA Performance Specification No. 2 (40 CFR 60, Appendix B). Data from the NO_x CEMS shall be used to determine compliance with the emission standard (in lbs/MMBtu) on a thirty (30) day rolling average as stated in specific Condition 28 of the 06/30/2004 permit. All of the CEM calculation, data reduction, recordkeeping, and reporting requirements of NSPS Subpart Db shall apply. A thirty (30) day notification prior to the demonstration of continuous monitoring system performance and subsequent notification requirements, are to be submitted to the Department (Director, Piedmont Regional Office).

(9 VAC 5-50-40 F, 9 VAC 5-50-410, 9 VAC 5-80-110 and Conditions 16 and 28 of the 06/30/2004 Permit)

2. A continuous opacity monitoring system shall be installed on the package boiler, Unit Ref. No. 3, stack to measure opacity when the boiler is burning No. 2 fuel oil. The continuous opacity monitor shall be installed and operational within ninety (90) calendar days of the actual firing of No. 2 oil in the package boiler. The opacity monitor shall be performance-tested in accordance with EPA Performance Specification No. 1 (40 CFR 60, Appendix B). A thirty (30) day notification prior to the demonstration of continuous monitoring system performance and subsequent notification requirements, are to be submitted to the Department Director, Piedmont Regional Office.

(9 VAC 5-50-40 F, 9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 17 of the 06/30/2004 Permit)

3. The continuous monitoring data generated by the opacity monitor may, at the discretion of the Board, be used as evidence of violation of the emission standards. These data shall be kept on file and made available to the Department upon request.

(9 VAC 5-50-40 F and Condition 18 of the 06/30/2004 Permit)

4. The NO_x and opacity monitoring systems shall meet a minimum data availability of 90 percent of package boiler, Unit Ref. No. 3, operating hours on a 12-month rolling average. The NO_x monitoring systems shall also meet the quality assurance requirements of 40 CFR part 60, Appendix F.

(9 VAC 5-170-160, 9 VAC 5-80-110 and Condition 19 of the 06/30/2004 Permit)

C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual throughput of (each permitted fuel) distillate oil, propane, and natural gas fired in the package boiler, Unit Ref. #3, calculated monthly as the sum of each consecutive 12-month period.
- b. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
- c. Dates and hours of operation for the package boiler not to exceed two thousand eight hundred and eighty hours (2,880) calculate as the sum of each consecutive 12-month period.
- d. CEM records for the package boiler (upon compliance with Condition 17 of 06/30/2004 Permit).
- e. Annual capacity factor calculations for the package boiler; annual capacity factor is defined in 40 CFR subpart Db paragraph 60.41b.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 5-20-110 and Conditions 17 and 33 of the 06/30/2004 Permit)

D. Testing

1. Performance testing for the package boiler, Unit Ref. No. 3 shall be conducted for nitrogen oxides as required in 40 CFR 60 subpart Db paragraph 60.46b (h) 2 until requirements stated in Condition 17 of the 06/30/2004 Permit have been met. The required testing shall be conducted on an annual basis or after each four hundred (400) hours of boiler operation, whichever occurs first. Testing shall be conducted within thirty (30) calendar days of exceeding four hundred (400) hours of operating time.
(9 VAC 5-170-160, 9 VAC 5-50-410, 9 VAC 5-80-110, Conditions 17 and 35 of the 06/30/2004 Permit)

E. Reporting

1. The permittee shall submit fuel quality reports to the Director, Piedmont Region, within thirty (30) days after the end of each calendar quarter. If no shipments of distillate oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no oil was received during the calendar quarter. If distillate oil was received during the calendar quarter the reports shall include:
 - a. The dates included in the calendar quarter,
 - b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition IV.A.4 for each shipment of distillate oil, and
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-80-110)

2. In the case that the package boiler, Unit Ref. #3 fires No. 2 fuel oil or exceeds 10 percent of the annual capacity factor the, a NOx or opacity monitor shall be installed and therefore the permittee shall be required to submit reports to the Director, Piedmont Regional Office within thirty (30) days after the end of each calendar quarter as described in 40 CFR 60.49b (h) and (i). Details of the quarterly reports are to be arranged with the Director, Piedmont Regional Office. With regard to the opacity monitor, the quarterly report shall include excess emission and monitoring system downtime reports and/or summaries in accordance with 40 CFR § 60.7 (c) and (d). Excess opacity emissions are defined as periods for which the average opacity exceeds the limit stated in specific Condition 31 of permit 06/30/2004.

(9 VAC 5-50-50, 9 VAC 5-170-160, and Conditions 31 and 37 of the 06/30/2004 Permit)

V. Requirements: WOOD YARD – Unit Ref. #4

A. Limitations

1. Particulate emissions from the slashing process shall be controlled by good air pollution control practices. The slashing process shall be provided with adequate access for inspection.
(9 VAC 5-40-80, 9 VAC 5-40-330, 9 VAC-5-50-300 and 9 VAC 5-80-110)
2. Particulate emissions from coal handling, slashing, debarking and chipping process operations shall not exceed the standards set in Article 4, table 4-4A.

(9 VAC 5-40-260)

3. Fugitive dust shall be controlled as follows and in accordance with Chapter 40 Articles 1 and 4, and Chapter 50 Article 1:
 - a. Debarking shall take place in an enclosed building;
 - b. Bark shall be conveyed pneumatically to the boiler through a closed conduit;
 - c. Emissions from the chipper shall be controlled by: an enclosed building; use of a closed system cyclone; and pneumatic transport of chips;
 - d. Coal shall be stored in a storage pile and conveyed to the boiler using a covered conveyor;
 - e. All material being stockpiled shall be kept moist, as needed, to control dust during storage and handling to minimize emissions.
 - f. Haul roads shall be controlled by wet suppression, asphalt, or other suitable chemicals, as needed. The main entrance road shall be paved. Reasonable precautions shall be taken to prevent disposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-40-90, 9 VAC-40-330, 9 VAC-5-50-300 and Condition 10 of the 06/30/2004 Permit)

4. Good air pollution control practices and enclosure shall control particulate emissions from the debarking/chipping process. The debarking/chipping process and enclosure shall be provided with adequate access for inspection.

(9 VAC 5-50-20, 9 VAC 5-50-260, and 9 VAC 5-80-110)

5. Visible emission from the debarking/chipping process shall not exceed 20 percent opacity except during on one (1) six-minute period in any one-hour in which visible emissions shall not exceed 30 percent opacity.

(9 VAC 5-50-80, 9 VAC 5-50-260, and 9 VAC 5-80-110)

B. Monitoring

1. An annual internal assessment shall be conducted on the enclosure by the permittee to insure structural integrity and to insure the equipment is in proper operating condition.
(9 VAC 5-50-20 and 9 VAC 5-80-110)
2. The debarking/chipping process enclosure vents shall be observed visually for emissions at a minimum of once (1) each calendar week in which the emissions unit operates. The visual observations shall be conducted using 40 CFR 60 appendix A Method 22 techniques (condensed water vapor/steam is not a visual emission) for at least a brief time to identify the presence of visual emissions. If the debarking/chipping process enclosure vent is observed having visible emissions, it shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visual emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visual emissions. If the six (6) minute VEE exceeds the unit's opacity limitation , a VEE shall be conducted on these emissions for at least three (3) - six (6) minute periods (at least 18 minutes). Visual emissions shall not exceed 20 percent opacity but not greater than 30 percent opacity for more than one six minute period in any one hour. All visible emission observations , VEE results, and corrective actions shall be recorded.

40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE.

(9 VAC 5-80-110 and 9 VAC 5-50-50)

C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
 - a. Records of annual internal assessments
 - b. Records of visual emissions observations, VEE results and corrective actions.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 9 VAC 5-80-110)

VI. Requirements: Thermomechanical Pulp Mill – Unit Ref. #1

A. Limitations

1. VOC emissions from the steam tubes, primary refiners, and secondary refiners for the four (4) TMP lines shall be controlled by a double pass, plate, and frame water heat exchanger/condenser equipped with a quench water spray. The two (2) stage heat exchanger/condenser shall use water as the heat transfer medium.

(9 VAC 5-40-300 and Condition E-4 of the July 12, 1996 RACT Consent Agreement)

2. VOC emissions from the latency transfer chest and the rejects latency chest for the four (4) TMP lines shall be controlled by a double pass, plate, and frame heat exchanger/condenser. The first stage of the heat exchanger/condenser shall use water as a heat transfer medium. The second stage of the condenser shall use glycol as the heat transfer medium.

(9 VAC 5-40-300 and Condition E-5 of the July 12, 1996 RACT Consent Agreement)

3. Bear Island shall maintain a minimum overall VOC emission removal efficiency of forty point five (40.5) percent on a mass basis from the TMP emissions sources which follow: steam tubes, primary refiners, secondary refiners, latency transfer chest, and rejects latency chest from all four (4) TMP lines.

(9 VAC 5-40-300 and Condition E-6 of the July 12, 1996 RACT Consent Agreement)

4. The glycol heat transfer system shall operate at a minimum flow rate of three hundred (300) gallons per minute.

(9 VAC 5-40-300 and Condition E-9 of the July 12, 1996 RACT Consent Agreement)

5. The two (2) water heat transfer systems shall operate at a minimum flow rate of two hundred (200) gallons per minute.

(9 VAC 5-40-300 and Condition E-10 of the July 12, 1996 RACT Consent Agreement)

6. The heat exchangers/condensers shall operate at all times when the TMP mill is in operation.

(9 VAC 5-40-300 and Condition E-12 of the July 12, 1996 RACT Consent Agreement)

7. The condensation from the two (2) heat exchangers/condensers shall be discharged to the Waste Water Treatment Plant.

(9 VAC 5-40-300 and Condition E-18 of the July 12, 1996 RACT Consent Agreement)

8. In order to minimize the duration and frequency of excess emissions due to the malfunctions of process or air pollution control equipment, Bear Island shall:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance, including dates and duration of any outages. These records shall be maintained on site for a period of five (5) years and shall be made available to the DEQ upon request.
 - b. Maintain an inventory of spare parts that are needed to minimize duration of air pollution control equipment breakdowns.

(9 VAC 5-40-300 and Condition E-23 of the July 12, 1996 RACT Consent Agreement)

B. Monitoring

1. The three (3) heat transfer systems contained in the two (2) heat exchangers/condensers shall be equipped with inlet temperature and outlet temperature gauges. The inlet and outlet heat transfer system temperatures shall be measured continuously. The inlet and outlet temperatures shall be recorded once per eight (8) hour shift. The inlet and outlet temperatures shall be used to calculate a temperature differential for each heat transfer system. The temperature differentials shall be averaged on a daily basis. All continuous monitoring devices shall be maintained and calibrated in accordance with the manufacturer's specifications. At a minimum the continuous monitoring devices shall be calibrated annually and the results of the calibrations recorded.

Three (3) standard deviations will be used to determine the minimum temperature differentials for the two (2) exchangers/condensers, which are as follows:

HRS #1 – Water Side: 45°F
HRS #1 – Glycol Side: 4°F
HRS #2 – Water Side: 53°F

(9 VAC 5-40-300 and Condition E-7 of the July 12, 1996 RACT Consent Agreement)

2. The two (2) water heat transfer systems shall be equipped with liquid flow meters. The meters shall measure the amount of liquid flowing through the water heat transfer system continuously. The information from the meters shall be recorded once per eight (8) hour shift to calculate an average daily liquid flow rate.

(9 VAC 5-40-300 and Condition E-8 of the July 12, 1996 RACT Consent Agreement)

3. The three (3) heat transfer systems shall be equipped with alarms indicating the absence of liquid flowing to the two (2) heat exchangers/condensers. The alarms shall be maintained in accordance with the manufacturer's specifications.

(9 VAC 5-40-300 and Condition E-11 of the July 12, 1996 RACT Consent Agreement)

C. Recordkeeping

1. Bear Island shall maintain records of all operating parameters necessary to demonstrate compliance. These records shall be maintained for the two (2) heat exchangers/condensers and associated continuous temperature and flow monitoring equipment and shall include the following:
 - a. a maintenance schedule for the heat exchangers/condensers and associated monitoring equipment;
 - b. scheduled and unscheduled maintenance records;

- c. an inventory of spare parts that are needed to minimize durations of equipment breakdowns;
- d. written operating procedures;
- e. heat transfer medium inlet and outlet temperatures and temperature differentials (recorded once per eight (8) hour shift);
- f. liquid flow for the two (2) water heat transfer systems (recorded once per eight (8) hour shift);
- g. operating hours and capacity for the four (4) TMP lines recorded daily used to calculate a ninety (90) day rolling average;
- h. results of annual calibrations of the water temperature and flow monitors.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-300 and Condition E-22 of the July 12, 1996 RACT Consent Agreement)

VII. Requirements: Waste Water Treatment Plant – Unit Ref. #5

A. Limitations

- 1. Emissions from the operation of the Waste Water Treatment Plant (WWTP) shall be controlled by good operating practices.
(9 VAC 5-50-20, 9 VAC 5-80-110 and Condition E-19 of the July 12, 1996 RACT Consent Agreement)

B. Monitoring

- 1. All WWTP established parameters used to calculate emissions by the use of appropriate models shall be monitored.
(9 VAC 5-40-300 and 9 VAC 5-50-110)

C. Recordkeeping

- 1. The permittee shall maintain records of all WWTP operating parameters use to calculate emissions to demonstrate compliance with Condition VII.A of this permit. The permittee shall maintain records of annual emissions calculations and supporting data. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-40-300 and 9 VAC 5-50-110)

VIII. Requirements: Paper Mill (Paper Machine) – Unit Ref. #6

A. Limitations

- 1. Emissions from the operation of the paper machine shall be controlled by good operating practices.
(9 VAC 5-80-110 and 9 VAC 5-50-20)
- 2. Emissions from the cleaning of the paper machine shall be controlled by the use of good cleaning practices.
(9 VAC 5-80-110 and 9 VAC 5-50-20)

B. Monitoring

1. Operating and cleaning practices and established parameters used to calculate emissions from the operation of and cleaning of the paper machine shall be monitored.
(9 VAC 5-80-110 and 9 VAC 5-50-20)

C. Recordkeeping

1. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include but are not limited to the following:
 - a. Annual Volatile Organic Compound (VOC) emissions from the cleaning of the press, calculated monthly as the sum of each consecutive 12-month period.
 - b. Monthly and annual throughput of pulp to the paper machine. Annual emissions calculated from the pulp throughput shall be calculated monthly as the sum of each consecutive 12-month period.
 - c. Material Safety Data Sheets (MSDS) based on EPA Method 24 or certified product data sheets showing VOC content, toxic compound or HAP content, and water content for all cleaning solutions used on the paper machine.
 - d. Material Safety Data Sheets (MSDS) based on EPA Method 24 or certified product data sheets showing VOC content, toxic compound or HAP content, and water content for all solutions added in the paper making process.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and 9 VAC 5-50-20)

D. Testing – Periodic Monitoring

1. One (1) initial performance test using reference Method 18 (or equivalent) as approved by DEQ, shall be conducted on the Paper Mill (Bel Baie exhaust) stack emissions for Volatile Organic Compounds (VOCs) within three hundred and sixty four (364) days of the issuance date of this permit. The tests shall be reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the DEQ Piedmont Regional Office. The permittee shall submit a test protocol at least thirty (30) days prior to testing and a DEQ inspector shall be on site during the testing. Two (2) copies of the test results shall be submitted to the DEQ Piedmont Regional Office within sixty (60) days after test completion and shall conform to the test report format enclosed with this permit.

The Department will compare results of both the initial performance test (stated above) and submitted stack test data from 1995. The Department will use test results in making the determination to amend the permit and/or require future testing.

(9 VAC 5-50-30, 9 VAC 5-80-1200, and 9 VAC 5-50-410)

IX. Requirements: Facility-Wide

A. Limitations

1. At the time of the issuance of this permit the sludge dryer (Unit Ref. SD-1) has been inoperable for approximately twelve (12) years. The facility shall not operate the sludge dryer without prior

notification to the DEQ of their intent to place the equipment back into service. Operation of the sludge dryer may require permit modification.

(9 VAC 5-80-1100 and 9 VAC 5-80-110)

2. The thermomechanical pulp and paper mill must be constructed and operated as proposed in the initial submittals received by the Board up to and including May 25, 1977. If any changes are made to the thermomechanical pulp and paper process that will cause an increase in emissions of air pollutants, the permit is revoked.

(9 VAC 5-80-1100, 9 VAC 5-80-110 and Condition 2 of the 06/30/2004 Permit)

3. The sulfur content of the oil to be burned at the facility shall not exceed 0.2 percent by weight per shipment. The permittee shall maintain records (supplier fuel analysis) of all oil shipments purchased, indicating sulfur content per shipment. These records shall be available on site for inspection by the DEQ. Such records shall be current for the most recent five (5) years.

(9 VAC 5-170-160, 9 VAC 5-80-110 and 5-80-1100 and Condition 22 of the 06/30/2004 Permit)

4. Bear Island Paper Company, LLC. shall provide certification for each coal shipment indicating the percent sulfur content by weight. The certification shall be based on samples taken at the coal supplier's loading facility of each coal shipment in accordance with ASTM Method D-2234, Type I, Condition B (August 1989) to determine the percent by weight content of sulfur. In addition Bear Island Paper Company LLC. shall obtain random samples from each shipment of coal received at the mill and analyze the samples for sulfur. The sulfur records shall be available for inspection by the DEQ. Such records shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-170-160 and Condition 23 of the 06/30/2004 Permit)

5. Except where this permit is more restrictive than the applicable requirements, the NSPS, MACT, or NESHAP equipment as described in Condition 2 shall be operated in compliance with the requirements of 40 CFR 60 subpart Db.

(9 VAC 5-50-400 and 9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 32 of the 06/30/2004 Permit)

6. The cleaning solution used in the seven (7) parts washers located at Bear Island are non-halogen, the solution used does contain VOC therefore Article 24 - Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents shall be applicable. Any change to the current cleaning solution used in the seven (7) parts washers may need a permit to modify.

(9 VAC 5 Chapter 40, Rule 2-24)

B. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:

- a. Annual throughput of (each permitted fuel) coal, distillate oil, propane, natural gas, wood waste and paper waste/sludge fired in the combination boiler, Unit Ref. No. 2 and the package boiler, Unit Ref. No. 3, calculated monthly as the sum of each consecutive 12-month period.
- b. Certification for each coal shipment purchased, indicating sulfur (not to exceed 1.2 percent and ash (not to exceed 12 percent) content by weight, respectively, per shipment.
- c. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
- d. Dates and hours of operation for the package boiler not to exceed two thousand eight hundred and eighty hours (2,880) calculate as the sum of each consecutive 12-month period.

- e. CEM records for the package boiler (upon compliance with Specific Condition 17 of permit 06/30/2004).
- f. CEM records for the combination boiler.
- g. Once per shift the electrostatic precipitator meter/gage readings to include the primary and secondary voltage and amperage readings.
- h. Annual capacity factor calculations for the package boiler; annual capacity factor is defined in 40 CFR 60 subpart Db paragraph 60.41b
- i. Records indicating coal usage when wood, wood waste and paper sludge/paper waste is being fired in excess of four hundred and fifty (450) tons per day.
- j. The combination boiler flue gas oxygen content shall be recorded when the boiler is firing wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The oxygen readings shall be averaged on a thirty-day rolling basis.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 5-80-110 and Condition 33 of the 06/30/2004 Permit)

C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 F, 9 VAC 5-80-110 and Condition 34 of the 06/30/2004 Permit)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

<u>Pollutant</u>	<u>Test Method</u> <u>(40 CFR Part 60, Appendix A)</u>
VOC	EPA Methods 18, 25, 25a
VOC	EPA Methods 24, 24a
NOx	EPA Method 7
SO2	EPA Method 6
CO	EPA Method 10
PM/PM10	EPA Methods 5, 17
Visible Emission	EPA Method 9, 22

(9 VAC 5-80-110)

X. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
PH-I2	Ash Handling	9 VAC-5-80-720 B	PM/PM-10	
WWTP-I1	Oil and Water Separator	9 VAC-5-80-720 B	VOC	
WWTP-I2	Lime Silo	9 VAC-5-80-720 B	PM/PM-10	
ST-I1	Paper Machine Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I2	TMP Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I3	WWTP Storage Tanks	9 VAC-5-80-720 C	PM/PM-10, VOC	< 1,000 gallons
ST-I4	Warehouse Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I5	Powerhouse Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I6	Recycle Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I7	Wood Yard Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I8	Maintenance Storage Tanks	9 VAC-5-80-720 B	VOC	
MI-I2	Cooling Towers- <u>Non-VOC/Haps</u>	9 VAC-5-80-720 B	-	
MI-I3	Chillers - <u>Non-VOC/Haps</u>	9 VAC-5-80-720 B	-	
MI-I4	Core Cutting Machine/Bevler	9 VAC-5-80-720 B	PM-10	
MI-I5	Diesel Fire Pump	9 VAC-5-80-720 C	VOC, NOx, CO, SO ₂ , PM-10	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

XI. Compliance Plan – N/A

XII. Permit Shield & Inapplicable Requirements – None to List

XIII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
 (9 VAC 5-80-110 N)

B. Permit Expiration

This permit shall become invalid five (5) years from the date of issuance. The permittee shall submit an application for renewal of this permit no earlier than eighteen (18) months and no later than six (6)

months prior to the date of expiration of this permit. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the DEQ on the renewal application.

(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)

C. Recordkeeping and Reporting

All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements.
- b. The date(s) analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses.
- f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

1. Records of all monitoring data and support information shall be retained for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

2. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purposes of this permit, a deviation \equiv means any condition determined by observation, data from any monitoring protocol or any other monitoring which is required by the permit that can be used to determine compliance. Deviations include exceedances documented by continuous emission monitoring or excursions from control performance indicators documented through periodic or compliance assurance monitoring.

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to 114(a)(3) and 504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- b. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.
- c. The identification of each term or condition of the permit that is the basis of the certification.
- d. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the certification period.
- e. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- f. The status of compliance with the terms and conditions of this permit for the certification period.
- g. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall report by the next business day any deviations from permit requirements or any excess emissions, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.
(9 VAC 5-80-110 F.2)

F. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Director, Piedmont Regional Office, within four (4) daytime business hours of the occurrence. In addition, the owner shall provide a written statement, within 14 days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shutdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Board.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355.

(9 VAC 5-80-110 H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to

prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion;
5. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-50)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five (5) days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within thirty (30) days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within thirty (30) days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two (2) working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2. b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A - F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110 except subsection N shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

XIV. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

Standard for Odor: No owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any emissions which cause an odor objectionable to individuals of ordinary sensibility.

(9 VAC 5-40-140, 9 VAC 5-80-110 N, and 9 VAC 5-80-300)